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ABSTRACT

Needs assessment is defined as the contrast between present and desired conditions. To determine needs for educational program planning, a cooperative effort is recommended, involving parents, students, community members, teachers, and administrators. This training guide was developed for inservice training on implementing the concepts and practices involved in needs assessment. Fifteen steps are described: (1) determining the scope and possible outcomes of the program; (2) establishing decision rules; (3) stating goals for each component; (4) assigning priorities to the goals; (5) conceptualizing the data collection process; (6) obtaining measurement instruments; (7) obtaining the superintendent's approval; (8) collecting, summarizing, and reporting the data; (9) setting final performance standards; (10) determining needs; (11) determining the priorities among needs; (12) determining the feasibility of the desired program; (13) identifying the possible causes of existing weaknesses; (14) developing program objectives and activities; and (15) reviewing the proposed programs. The described needs assessment procedure is followed by stating the program; and using the evaluation data for decisionmaking and for future needs assessment. Exercises include selecting and ranking goals; selecting a needs assessment model; and questionnaire development. A bibliography is appended. (MH)

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developing a workable needs assessment process

by
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John Plakos
Jim Cox

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INTRODUCTION

Educational program planning is rapidly becoming a cooperative effort of parents, students, community members, teachers and administrators. Whenever individuals band together for any purpose, a common foundation for this work as a group must be established. A helpful foundation for persons planning educational programs is a clear understanding of what they are to accomplish and how they will approach their task. A precise description of the present condition of the existing educational program related to the desirable condition of the program can greatly assist in gaining this clear understanding. Needs assessment is the process used to show a contrast between present and desired conditions and is applicable to educational program planning.

Despite the acknowledged importance of needs assessment — nearly all recent treatises on program planning discuss it, (e.g., Kibler, et al., 1970; Tanner, 1971; Popham, 1972) and most funding agencies require it — little has been written on how to actually conduct such a process. Even less has been written on how to teach others to assess needs. This training guide has been developed for both purposes: to be used during inservice training sessions to teach persons **how to implement** the concepts and practices involved in needs assessment; and to be used in conjunction with a needs assessment instruction workshop to instruct inservice training leaders in **how to teach** these concepts and practices.

The approach to needs assessment presented in this guide agrees with most presented in literature on the topic. Trainees who successfully complete the activities contained here should be able to develop and manage workable needs assessment processes based on this or **other** approaches.

SECTION I: RATIONALE FOR INCLUDING NEEDS ASSESSMENT IN THE PROGRAM CYCLE

The rationale for including needs assessment in the program cycle is essentially twofold: to generate sound planning; and to satisfy funding agency accountability requirements. These two elements are inter-dependent — sound planning goes far toward guaranteeing a successful, worthwhile and fundable program. If a needs assessment is conducted at the beginning of the program cycle, the chances of erring at other stages of the cycle are greatly decreased. The program cycle can be diagramed as follows:

The clockwise arrows in the diagram show the progression through the various stages. Evaluation findings provide input for the next needs assessment, and the cycle continues. The arrows pointing counter-clockwise indicate that revisions are made as required on an on-going basis.

A major assumption of needs assessment is that it is based on an explicit, accepted philosophy or purpose. Unless the program philosophy is endorsed by those who will implement the developed program, it probably will not succeed. Planners are discouraged from conducting a needs assessment when the philosophy for the program is not accepted by those responsible for program implementation (Metfessel and Michael, 1967, pp 931-943; Klausmeier, et. al., 1971).

For purposes of this training guide needs assessment is defined as follows:

> Needs assessment is the phase of the program planning process in which information from a variety of sources is used to: 1) estimate discrepancies between desired and existing conditions; and 2) justify funding of programs intended to eliminate those discrepancies.

This definition implies several additional understandings. A **need** is a discrepancy between "what is" and "what should be," i.e., a discrepant condition. **Information** is data or knowledge which is useful in describing the present or desired condition.

Planners are persons who govern the procedures for developing the educational objectives and strategies which in turn are implemented as the program. **Clients** are those persons being served by the program and who depend on it to assist them in acquiring prespecified knowledge, skills, or attitudes. **Resources** are talents, services, establishments, materials, or other entities or phenomena which are accessible and can be used in educational strategies.

SECTION II: STEPS IN CONDUCTING A NEEDS ASSESSMENT

Procedures for conducting a needs assessment may vary, but it is always done after the program philosophy is established, and prior to finalizing program objectives and solution strategies. The procedures to be used should be stated in a needs assessment management plan.

A conceptual scheme for conducting a needs assessment is presented in a 15 step flow chart on page 6. To use this needs assessment procedure one assumes that a statement of philosophy exists. These steps of the needs assessment process are described.

Step 1 Program planners must first **determine the scope and possible outcomes of the anticipated program.** All parts of the program should be clearly conceptualized and the interrelationships of those parts understood. To conceptualize program components, and identify their interrelationships, planners should review related literature, examine available needs assessment models, estimate the needs assessment timeline, define the needs assessment process, and establish a needs assessment management plan. For example: if a school district is considering implementing a new science program, the planners should examine what implications the new program might have for teaching and study methods, what parent reactions might be anticipated, what pupil scheduling changes might be required, the adequacy of the library and community resources for research that students possibly would conduct, and what impact the new program might have on student learning. In this example, the possibility of comments in staff development, learner attainments, parent participation, program management, and auxiliary services has been suggested. The planners then would determine the type and amount of data they need to assure a high probability of success for the implemented program. They should estimate how long it might take to obtain the information required to complete their planning.

An example of a needs assessment management plan is presented in the Appendix on page . The example illustrates how districts would establish what is occurring, who would be contacted or involved, who has major responsibility for completing the activity and when it will be completed. Failure to complete a needs assessment management plan might result in confusion over who is to conduct essential tasks which must be completed if planning is to progress smoothly.

Management plans must accommodate local requirements. The sample plan contains suggestions which have application to many situations, but district staffs should be sensitive to their uniquenesses and manage their neeeds assessment accordingly.

Step 2 **Decision rules should be established**. These rules should give guidance regarding the sources of information to be used; they should limit the procedures to be used to gain feedback, arrive at consensus, determine criticality of goals, and other aspects of program planning (this concept will be illustrated later in the manual). As examples: There might be agreement that scaling will be used in establishing criticality rather than ranking (this decision rule will be demonstrated in Exercise 4). There might be agreement on whether consensus will be arrived at through discussion, weighting, or another group process.

Step 3 After the scope and anticipated outcomes of the program have been conceptualized and the decision rules established, planners should collaborate with those who may be affected by the program in **stating goals for each identified component.** These

goals should be estimates of how much or how well behaviors need to be evidenced or performed in order to affirm program success. Estimating goal standards can be illustrated by continuing the science program example begun in Step 1: perhaps as an outcome of staff development 100% of the teachers should be able to implement the required teaching methods successfully; 95% of the parents should understand and support the program; the program might require team teaching by six of the ten science teachers; the program should increase the student's ability to think and work independently; the program should increase student learning so that, on the average, students perform two months above a norming sample on a standardized test.

Step 4 Representatives from each group affected by the program, (i.e., Students, parents, community members, teachers, administrators) should **scale the goals according to importance**. Scaling can be done independently by each group or collectively by aggregating data from all the groups. In this workshop groups function independently to complete Step 4. Those scaling the goals should be aware that this process is done separately from considering relative needs of goals. That is, there should be no data used to estimate goal importance; degree of importance, at this point, is based only on participant judgment.

Step 5 The planners must now **conceptualize the data collection** process. Included in this process should be: specification of how much data are needed from the various school publics, sampling procedures, data collection timeline, and information flow which would be most effective for the planners.

Step 6 Program planners must **obtain instruments** which accurately assess attainment level for each goal. The level of performance which exists at the time of planning must be measured if one is to establish the discrepancy between "what is" and "what should be."

The measures used to gain these required data operationalize each goal area. It must be remembered that one measure is not comprehensive, and for any goal there is probably more obtainable than usable information. The planners should obtain the kind and amount of data that will permit their best use of human judgment. Planners should take time to examine each question from which data will be gained. They should be certain that questions clearly solicit relevant information required to plan properly.

How data are going to be collected is important. If existing instruments, even with some modification, can yield desired information, they should be used. If not, new instruments must be developed.

Step 7 **Superintendent approval** of the proposed procedures and instruments **must be secured**. If approval is denied, return to Step 1 and do additional planning. If all the preceding steps have been successfully completed, the planners are now ready to administer instruments interview respondents, interrelate information, etc., and begin data collection.

Step 8 **Data are collected, summarized, and reported**. It is this step that some consider to be all that is involved to needs assessment.

Step 9 The planners now **refine the estimated performance standards.** Standards were estimated in Step 3 and should now be fixed at a level realistically attainable for

each goal. In some instances the initial goal performance standards are acceptable and will not require revision; in other cases substaintial refinement may be necessary.

Step 10 **Relative needs are determined** by contrasting the present level of performance reflected in the obtained data to the attainable performance standards which were established in Step 9. Now that discrepancies are apparent, the planners know the needs of the program. Recall that need was defined earlier as the discrepancy between present and desired conditions.

Step 11 When the planners show the relationship between the relative importance of goals (Step 4) and the identified needs (Step 10), they are able to **ascertain which goals are most "critical"** to the success of the program. The resources available to the program can be allocated systematically to remove needs based on their criticality. The area of greatest criticality would be one where a goal of very high importance would also be highly discrepant from a desired performance standard on the criterion measure. The area of least criticality, on the other hand, would be one where a goal of low importance closely approximated the desired performance standard on the criterion measure.

Step 12 After goal criticality has been established, resources available to the program are inspected to **determine the feasibility of the desired program**. The planners now must speculate whether or not they might implement the desired program in all goal areas, allocate resources at a less than optimal level, or exercise other possible options. Program areas which are deliberately and defensibly excluded are considered areas of selected neglect.

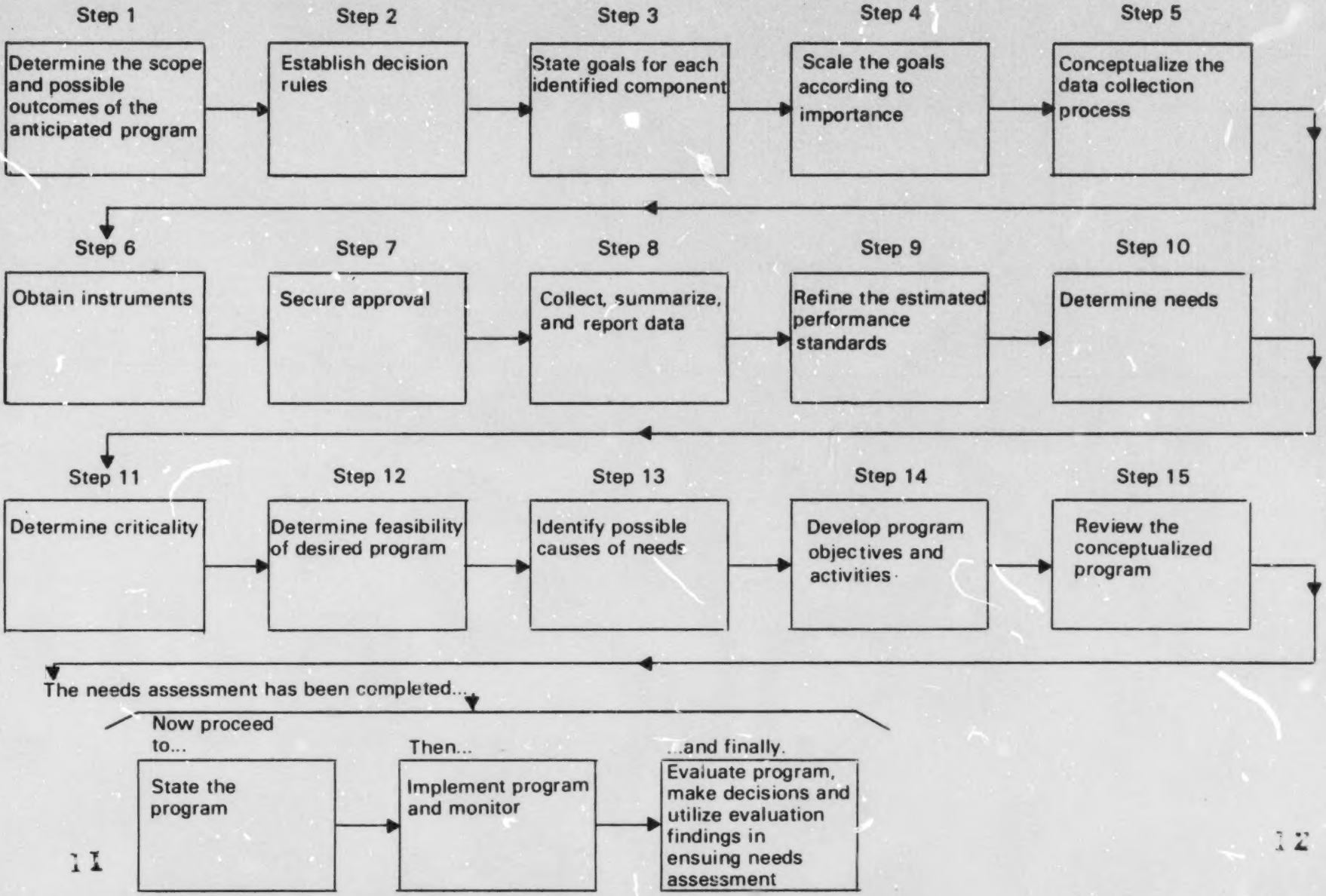
Step 13 Inspection of the discrepancies between the desired and present conditions is done to **identify possible causes of the needs**. After the plausible reasons for needs are identified, possible resolutions of those causes are considered. Those possible resolutions are proposed as program activities. It should be noted that possible causes for discrepancies might be identified earlier in the process, but it is at this step when those causes are systematically analyzed.

Step 14 Beginning with the area of greatest criticality, the program planners **propose tentative objectives and activities which should result in goal attainment.**

Objectives should be designed to ameliorate needs. Objectives should identify who, will do what, when, under what conditions, at what level of performance, and how performance will be measured. All objectives must be clearly related to the stated goals (Plakos, 1975). Activities should be designed to remove the causes of needs. Activities should identify who, will do what, when, and should describe a logical sequence of events that will result in objective attainment.

Step 15 Planners should again **review the conceptualized program** to be certain that sufficient resources are available. This should be done after many program alternatives have been advanced, and before these ideas become stated as the program which will be implemented. Technically the needs assessment process is now concluded. Program planning begins when the program is being proposed. Later, evaluation findings will be recycled through the next needs assessment process.

Figure I: Needs Assessment Process



To summarize, the needs assessment process has the following set of characteristics:

- It is based on goal statements.
- It specifies procedures for establishing goal importance.
- It requires specification of desired performance level for each goal.
- It utilizes criterion measures to describe existing conditions.
- It utilizes findings from criterion measures to describe discrepancies between desired performance levels and existing conditions.
- It presents procedures for establishing need criticality and program priorities.
- It provides for analyzing need discrepancies.
- It provides for continuing program planning, i.e., objectives and activities/strategies specification, developing program management plan, etc.
- It provides for utilizing evaluation findings in future program planning.

SECTION III: COMMON ERRORS MADE WHEN CONDUCTING EDUCATIONAL NEEDS ASSESSMENT AND SUGGESTED ALTERNATIVES

For a variety of reasons, needs assessment is often done poorly. Russell (1976) surveyed sixty-two program decisions makers and clustered identified errors made when conducting needs assessment into three groups: technical, staff, and community. Specific errors identified in the Russell study and suggested ways to avoid them are discussed in this section of the guide.

Technical

When technical errors were made in needs assessment, they usually were the result of a lack of a functional description of the process. For instance, the difference between setting goal priorities and determining the discrepancy between the desired and present condition has been a source of much confusion. To assess need, one must utilize a criterion measure to ascertain the degree to which the present practice approximates a desired practice. To place goals in order of priority is an important step in determining goal criticality, but that alone does not constitute a needs assessment.

Another source of error was in the area of data collection. Some school personnel gathered data about the program without knowing how the data were to be used. Often the parameters for data collection did not correspond to the existing program goals; consequently, much of the collected data were never used to modify present programs or plan future programs. Unless data are intended to be used, they should not be collected. A program planner should know what questions the anticipated data should assist in answering before collection begins. To gather as much information as possible in the hope that serendipity will solve major educational problems is not defensible.

Instrument development was an underestimated task. It is difficult to construct criterion measures which evoke useful information from respondants. Program staff should avoid using poorly constructed instruments, lengthy questionnaires, or measures which have ambiguous, repetitious or compounded items. Instruments should be carefully constructed, uniformly administered and objectively scored.

When adopting, adapting, or constructing needs assessment instruments, the planners should consider how the information from each question is to be used. Other factors, such as which is the best source for desired information and how that information should be obtained, are also important considerations. It is helpful to show the relationship between desired information and proposed needs assessment instruments graphically. In this training guide, showing these relationships is referred to as "mapping". Dimensions of data collection which should be accounted for are: the goals being assessed, goal attributes or elements, proposed instrument items, data summary procedures, and the persons who will provide feedback.

Among those surveyed, some planners preferred to use locally devised instruments. Frequently, the reliability and validity of locally developed measures were not established. When suitable measures are available, they should be obtained and used. Sources which describe available instruments should be consulted when identifying appropriate measures (Buros, 1938-1974; Hoepfner, et. al., 1970-74, Johnson, et. al., 1971; Robinson, et. al., 1973).

Local district personnel can avoid some instrument development problems by obtaining expert consultant assistance from such sources as county schools offices, colleges, universities, or private firms. Helpful books and articles on instrument construction also are available (Adkins, 1974; Klein, et. at., 1973; Severy, 1974; Jacobs, 1974; CTB/ McGraw-Hill, n/d; Cox, 1976).

Staff

A major error made by staff was that of collecting needs assessment data and not using these data in planning the program. The resulting loss of confidence by the staff in the leadership produced cynicism among staff members and resistance to systematic planning. Some educators regarded needs assessment as a part of a passing fad or a "political game." In addition to the attitude that the needs assessment process should be regarded with detachment, many expressed the view that planning procedures were used in a piece-meal fashion and lacked application by top level administrators. The lack of adequate time allocation to permit preparation for conducting the needs assessment was frequently criticized. The desirability of having the needs assessment process articulated and coordinated was voiced by educators at all levels.

Competencies of staff given responsibility for planning and implementing the process was cited as a major reason for failure to conduct needs assessment effectively. These criticisms were specifically directed at failure to build a management plan which would explicate required data, data sources, feedback routes, and the timeline. The appendix (pages 56-58) presents an example of a needs assessment management plan.

Community

Difficulties with community involvement in needs assessment were similar to those expressed by staff. It was reportedly difficult to get a sufficiently representative sampling of parents to return questionnaires to place confidence in the feedback. The staff often shifted responsibility for their failure to obtain useful needs assessment information to the parents. Staff accusations included statements that parents were apathetic, illiterate, unable to complete the forms, or reticent to advise school personnel on educational matters. School personnel questioned the validity of community feedback and claimed that giving advice to authority figures violated cultural mores of the parents. Some school personnel had overcome many of these obstacles by establishing telephone networks to survey the community, or by employing community liaison staff to interview a carefully drawn sample of community representatives.

Summary

The most commonly made errors can be categorized in three primary groupings:

Technical

- Failed to establish a uniform needs assessment process.
- Substituted setting goal priorities for needs assessment.
- Omitted criterion measures to identify present conditions in relation to prespecified goals.

- Collected data which did not relate to program goals.
- Underestimated skill necessary to develop questionnaires or other instruments.
- Data summary procedures were cumbersome and obscured the relationship between the data and their intended use.

Staff

- Lacked adequate planning time or time management strategies
- Failed to use needs assessment data in program planning.
- Administrators did not have a needs assessment management plan.

Community

- Representative samples of parents were said to be difficult to obtain.
- Parents were said to be illiterate, apathetic about school matters, or reticent to advise school personnel.

SECTION IV: INTRODUCTION TO THE WORKSHOP

A scenario is presented to start the workshop and to get participants actively involved in identifying problems that a properly conducted needs assessment can alleviate. The workshop leader will select four individuals to play the roles in the scenario.

Four exercises with several activities each are also used in the workshop and comprise the remainder of this training guide. The exercises are intended to provide "hands on" experiences, and deal with:

- Setting goals and establishing their importance
- Selecting a needs assessment model
- Developing needs assessment instruments
- Organizing for data analysis
- Establishing goal criticality

This sequence of the exercises is intended to present needs assessment concerns as they are encountered by educational practitioners, and to ensure a smoothly flowing workshop. They parallel needs assessment steps 1 through 15, as previously listed.

SCENARIO: THE MORNING AFTER THE NIGHT BEFORE

Characters:

Mr. Luskin - Director of Instruction, Cloudview High
Mrs. Smith - Chairperson of the English Department
Superintendent - Liaison with the Board
Mary Thatcher - Counselor at Cloudview High

Setting:

Imagine that it is the morning after the first school board meeting in September. The Board has decided to place major emphasis on the language program during the coming school year because some parents complained that their children had to enroll in "bonehead English" in college. All of these students had graduated from Cloudview High School last spring.

Mr. Luskin, the Director of Instruction at Cloudview High, is concerned that Mrs. Smith, Chairperson of the English department, will become upset when she learns of the Board's decision. Mr. Luskin is waiting for Mrs. Smith in the staff workroom so that he can discuss the Board's decision with her before she learns about it from one of the teachers who attended the meeting. Mrs. Smith has a tendency to be somewhat outspoken.

Mrs. Smith enters the room, sees Mr. Luskin, and immediately walks in his direction.

Mrs. Smith: Good morning, Mr. Luskin. Did you hear about the Board meeting last night?

Mr. Luskin: Good morning, Mrs....

Mrs. Smith: That Board decided to put an emphasis on the English program just because four students have to take remedial English this fall! Don't they know that our students, on the average, have always done well on the college entrance tests, and most do well in college English classes?

Mr. Luskin: Well, that's what I wanted to speak with you about. When the parents of these students described the preparation their children supposedly got at Cloudview, they made it sound like we had a pretty weak English program. They said that many other students also have had difficulty in college English courses, but that their parents just hadn't complained about it to the Board.

Mrs. Smith: That's just not true! Mary Thatcher has been keeping records on how well our students have done in college for years. What has happened to the ITBS results we have been getting?

Mr. Luskin: Did you say that Mary...., our girls counselor, has some records to show how well our students have done?

Mrs. Smith: Yes, she does.

Mr. Luskin: That is very good news! The superintendent would like to meet at 2:30 this afternoon to prepare a presentation to the Board about our English program and the revisions we plan to make. I'll also ask Mary to attend.

It is now 2:30 p.m. in the superintendent's office

Superintendent: Thank you all for coming to this meeting on such short notice. As you may know, the parents of four of our spring graduates attended last night's School Board meeting and **demanded** that we improve the quality of our language program. I was not aware that they were coming. They made a very impassioned and persuasive presentation, and the Board agreed to place an emphasis on improving the language program this year. The Board also asked me to report how well our graduates have been doing in college classes in the past. We were not able to support any statements with definite information last night, but I told them that I thought we should be able to have a report ready for the next Board meeting.

Mrs. Smith: Those parents just don't have their facts straight!

Mr. Luskin: Mrs. Smith reminded me that Ms. Thatcher has some data which might help us in preparing a report. Mary....

Mary Thatcher: Yes, I do have some information. During the past six years, our 11th and 12th grade students have scored, on the average, between the 60th and 66th percentile rank on the language portion of the ITBS. Our seniors who planned to go to college ranked between the 82nd and 88th percentile during the same period on the ACT, and slightly higher on the CEEB. The grades returned to us from the college and university systems indicate that our students earn the same grades in college that they had been making while at Cloudview.

Superintendent: Mr. Luskin, were you aware last night that we had this information?

Mr. Luskin: This information is usually used by the counselors in planning student programs or advising parents and students on alternatives open to them. I quite frankly had forgotten about it.

Superintendent: Ms. Thatcher, the information you have shared with us will be very helpful in preparing the Board report. Have you ever thought of summarizing this information for Mr. Luskin and the staff on a regular basis?

Mary Thatcher: I have thought of it, but no one has requested this kind of information before.

Note some problems that you observed to be portrayed in this scenario.

Some possible problems shown in the scenario are:

- Lack of communication among school personnel
- Lack of program planning procedures
- Reactive posture by the Board
- No process for dealing with parent complaints
- Lack of role definitions
-
-
-

Exercise 1: Setting Goals and Establishing Their Importance
(Approximate Time — 45 minutes)

Early in the needs assessment process program goals are established. These goals are ranked in order of importance and later the importance is related to discrepancy between present and desired conditions to establish criticality.

In Exercise 1 participants are assigned to one of three groups: parents, teachers and support staff, and administrators. While in these groups they review the established goals, add new goals if they choose and rank the goals according to importance.

To accomplish the goal ranking:

1) Assign participants to role play the part of parents, teachers and support staff and administrators. Those playing each role work together as a group.

2) Distribute the School Description (page 16) and the Program Goals (page 17).

3) Each participant reviews the school description and the goals which have been previously adopted. New goals may be added should the group choose to do so. Each group adds new goals independently of the other groups.

4) After about 15 minutes distribute the goal scaling forms (page 18).

   Ask participants individually to assign the number of points they wish to allocate to each goal. (Points are allocated at a rate of the midpoint of the scale times the number of goals. When scaling 10 goals on a scale of 1 to 9, fifty points are allocated; i.e., 5 is the midpoint of the range of 1 to 9. When multiplied by 10, the total points equal 50.)

Remind the participants that the column headed "cumulative points" can be used to monitor their rates of allocating points.

5) Each participant records individually assigned point values on the GROUP DATA CHART (Sample on page 19) which the workshop leader has posted on the wall at prominant locations.

NOTE: Some time between the conclusion of Exercise I and the beginning of Exercise 4, the trainer must scale the goals for each group or supervise the scaling by the groups. To assign scale values to the goals, sum the values assigned by each individual and divide by the number of individuals; i.e., find the mean for each goal. Put an "X" at the point corresponding to each goal mean on the line at the bottom. Write the number of the goal above that point.

THE SCHOOL

A Description

GRADE SPAN: K-6

ENROLLMENT: 575 - 180 families

	K	1	2	3	4	5	6
N =	88	70	80	75	87	85	90
CLASSROOMS:	4	3	4	3	4	3	3

BUILDING CAPACITY: 600

PERSONNEL:

24	Classroom Teachers
1	ECE Coordinator
0	Specialists
80	Parent Volunteers
10	Paid aides (reading/math only)
1/5	SchoolNurse

SOCIO-ECONOMIC: 34% Estimated Low Income

ETHNIC: 50% White

30% Black

20% Mexican-American
(8% of these are non-English speaking)

TRANCIENCY: 30% Turnover

EDUCATIONAL GOALS

1. Each learner will demonstrate the knowledge, skills, and attitudes necessary to establish and maintain **good physical health.**
2. Each learner will demonstrate the knowledge, skills, and attitudes necessary to **understand the American cultures and other cultures of the world.**
3. Each learner will demonstrate the knowledge, skills, and attitudes necessary to **display good citizenship and responsible social interaction.**
4. Each learner will demonstrate the knowledge, skills, and attitudes necessary to **acquire information through reading.**
5. Each learner will demonstrate the knowledge, skills, and attitudes necessary to **develop an organised system for independent learning.**
6. Each learner will demonstrate the knowledge, skills, and attitudes necessary to **establish and maintain a feeling of self-worth.**
7. Each learner will demonstrate the knowledge, skills, and attitudes necessary to **understand and utilize mathematical concepts.**
8. Each learner will demonstrate the knowledge, skills, and attitudes necessary to **wisely use leisure time.**
9. Each learner will demonstrate the knowledge, skills, and attitudes necessary to **communicate through receptive and expressive language.**
10. Each learner will demonstrate the knowledge, skills, and attitudes necessary to **explore potential occupational choices.**

SCALING GOAL IMPORTANCE

Instructions: Indicate the importance that you place on the identified goal statements by assigning _____ points to them. Because the points are limited, you must determine carefully how you would like to see the points allocated. For each goal, you may commit from one point to a maximum of nine points. Enter your point allocations on the GROUP DATA CHART

	Point Allocation									
Goal	1	2	3	4	5	6	7	8	9	Cumulative Points
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
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17										
18										
19										
20										
21										
22										
23										
24										
25										

GROUP DATA CHART (SAMPLE)

	Goals	Group _____												Sum	Mean
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															

Least 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 Most

Goal Importance

EXERCISE 2: Selecting a Needs Assessment Model (Approximate time: 1 hour)

Rarely will there be a situation where no available needs assessment model can be applied to planning an educational program. Educators should develop skill in reviewing available models and selecting the model, or portions of models, which are appropriate for their purposes. A wide range of available needs assessment models are described in the Florida Educational Research and Development Council's **Research Bulletin, 1976 Needs Assessment Materials: An Annotated Bibliography**.

To apply the characteristics of a needs assessment model suggested on page to analysis of evaluatable needs asessment model, these fifteen features should be considered:

1) The grade level for which the model is suitable should be stated.
2) Goals should be suggested for each program area or component.
3) If goals are not suggested, then a method for setting goals should be described. Representatives from all populations affected by the needs assessment should be involved in goal setting.
4) There should be a process for establishing goal importance or preferences.
5) There should be guidelines for establishing desired performance levels for each goal.
6) Criterion measures should be provided for each suggested goal.
7) The criterion measures should be standardized, i.e., directions for administering and scoring the measures should be specified.
8) If criterion measures are not provided, the model should describe a procedure for selecting or developing these measures.
9) Procedures for managing obtained data, including summarizing forms, should be included.
10) The means of determining discrepancies and desired conditions should be described.
11) Procedures for establishing criticality by showing the relationship between goal importance and discrepancy should be provided.
12) The role of needs assessment in continued program planning should be clearly described.
13) User costs should be estimated.
14) Approximate time constraints should be stated to facilitate managing the process.
15) Language differences found in the target population must be accommodated.
16) How evaluation feedback is to be utilized in future needs should be explained.

In this exercise these features of needs assessemnt are applied to models to determine their appropriateness for use in some schools having different characteristics. In this exercise,

participants will examine actual needs assessment models. Some models which are suitable for large group inspection are:

- Center for the Study of Evaluation Needs Assessment Models (CSE)
- Alameda County Needs Assessment Model (ACNAM)
- Phi Delta Kappa Needs Assessment Model (PDK)
- Pupil Perceived Needs Assessment Model (PPNA)

These four models are used in this exercise. The PPNA requires availability of a cassette tape player.

Other models may be used at the discretion of the presenter. An excellent source to assist in selecting needs assessment models is the Florida Educational Research and Development Council publication.

To complete the exercise:

1) Explain that the needs assessment selection committee is made up of representatives from all the school publics; i.e., parents, teachers, administrators, and students.
2) Arrange participants in four teams of six to eight persons each.
3) Distribute the Needs Assessment Model Evaluation Form.
4) Randomly distribute the Needs Assessment Models that will be evaluated. For example:

   Group #1 - ACNAM Group #3 - PDK

   Group #2 - CSE Group #4 - PPNA

5) Apply the evaluation criteria to the needs assessment model being reviewed. (Allow approximately 45 minutes for the teams to review the needs assessment models.)
6) Ask each of the teams to review their findings with the group.
7) Ask each group to compare their findings with the feedback sheet (p. 26).
8) Ask each team to determine whether they would use the reviewed needs assessment with the assigned school or describe a school for which the model would be appropriate.

Activity 1: Needs Assessment Model Selection

Complete this **Needs Assessment Evaluation Form:**

1) Indicate the model your team is evaluating at the top of one of the columns lettered A-F.
2) Distribute portions of the needs assessment model being reviewed to the various members.
3) In the column selected, identify which characteristics of the needs assessment model being reviewed by your team are present.
4) Report your findings to the total group.

NEEDS ASSESSMENT EVALUATION FORM

	A	B	C	D	E	F
Write the name of the model your team is reviewing in one of these columns: i.e., PPNA, PDK, CSE, etc.						
1. The model is suitable for:						
elementary level (K-6)	☐	☐	☐	☐	☐	☐
secondary level (7-12)	☐	☐	☐	☐	☐	☐
college level	☐	☐	☐	☐	☐	☐
2. The method for goal setting provides:						
method for generating goals	☐	☐	☐	☐	☐	☐
goal statements	☐	☐	☐	☐	☐	☐
3. There is a process for establishing goal importance or preference. The methods for this process are:						
card sort	☐	☐	☐	☐	☐	☐
rating scale	☐	☐	☐	☐	☐	☐
weighted formulas	☐	☐	☐	☐	☐	☐
group consensus	☐	☐	☐	☐	☐	☐
4. There are guidelines for establishing desired performance levels for each goal	☐	☐	☐	☐	☐	☐
5. The model provides criterion measures for each goal.	☐	☐	☐	☐	☐	☐
The criterion measures are presented as:						
rating scales	☐	☐	☐	☐	☐	☐
performance data	☐	☐	☐	☐	☐	☐
demographic data	☐	☐	☐	☐	☐	☐
opinion polls, surveys	☐	☐	☐	☐	☐	☐
6. The administration and scoring procedures for each criterion measure are stated.	☐	☐	☐	☐	☐	☐

A	B	C	D	E	F

7. The model provides a method for development or selection of criterion measures for each goal.

8. The model provides:

   a. summarizing forms

   b. procedures for managing obtained data

9. The model provides a method for determining the discrepancy between the desired and present conditions

   The methods for determining discrepancies are:

   narrative or descriptive

   arithmetical difference score

   weighted formula

10. The model assists in establishing criticality by showing the relationship between goal importance and discrepancies

11. The model estimates user costs, including:

    instruments or materials

    inservice

    data analysis

    consulting

    management, personnel

12. The model estimates required time (indicate the time required in months)

13. The model accommodates language differences

    Which specific languages are accommodated?

    _____

    _____

14. The model suggests how evaluation data should be applied to future needs assessment

Needs Assessment Selection Feedback Sheet

Name of Model

	4			
Level				
Goals: Provided				
Generated				
Goal Importance				
Goal Standards				
Criterion measures in each goal area				
Standardized criterion measures				
Criterion measure development				
Summarizing forms				
Data Management				
Determining need				
Establishing criticality				
User costs				
Required time				
Language differences				
Uses evaluation data				

Needs Assessment Selection Feedback Sheet
(Completed)

	Name of Model			
	ACNAM	CSE	PDK	PPNA
Level	K-6	K-6	All	
Goals: Provided	△	△	△	
Generated		△		△
Goal Importance	△	△	△	
Goal Standards				
Criterion measures in each goal area	△	△		
Standardized criterion measures	△	△		
Criterion measure development				
Summarizing forms	△	△	△	
Data Management	△	△		
Determining need	△	△		
Establishing criticality	△	△		
User costs	△	△		
Required time	△	△	△	
Language differences	Spanish		Spanish	
Uses evaluation data				

Exercise 3: Needs Assessment Instrument Development (approximate time: 50 minutes)

Because schools vary considerably, rarely will the selected needs assessment model be adequate in all program areas. The type of schooling emphasized, organization, personnel skills, student or parent attitudes, and many other factors affect program development. When the selected model will not supply required information, educators must be able to develop additional instruments, or adapt existing ones to collect that information.

Most educational planners rely on standardized norm or criterion-referenced tests to collect student achievement data. Questionnaires, opinion surveys, unobtrusive measures, or observation techniques are most frequently used to assess attitudes held by students, teachers, parents, or others about the school and its program. School personnel often construct instruments or develop procedures to estimate how effectively activities result in learner attainments.

This exercise is designed to focus on the process of questionnaire development. When developing a needs assessment questionnaire, it is important that the program planner knows how the information will be used. By anticipating how each question will contribute information that will provide a basis for making decisions about what to include in the program, the planner can clearly place program elements into a useful context. Using the same teams, allow participants approximately 50 minutes to complete all four activities in this exercise.

NOTE: To complete this exercise participants will need copies of a County Course of Study, State Curriculum Framework, or local district curriculum guides.

Exercise 3, Activity 1: Identifying Goal Attributes and Data Sources (10 minutes)

1. Distribute Course of Study, State Curriculum Frameworks, and other curriculum guide materials.
2. Distribute worksheet and example or call attention to pages 28 and 29.
3. Using the materials distributed in step #1, ask participants to state a goal that they will analyze.
4. Participants analyze the goal that they stated and identify those attributes which assist to operationally define the goal.
5. Participants determine possible feedback providers. Feedback providers are persons or data sources which could yield information that can assist decision makers determine how closely the present condition approximates the desired condition.

Activity 1: Identifying Goal Attributes and Data Sources

Goal:

_____

_____

_____

Goal Attributes:

Knowledge related:
1.
2.
3.
4.
5.

Skills related:
1.
2.
3.
4.
5.

Attitude related:
1.
2.
3.
4.
5.

Feedback providers (e.g., students, teachers, parents, administrators, business representatives, civic respresentatives).

1.
2.
3
4.
5.
6.
7.
8.
9.
10.

Activity 1: Identifying Goal Attributes & Data Sources

Goal: 8

Each learner will demonstrate the knowledge, skills, and attitudes required for independent autonomous learning.

Goal Attributes:

Knowledge related:	1.	Knows how to use free time to complete assignments.
	2.	Knows a logical method of study appropriate to the assignments.
	3.	
	4.	
	5.	
Skills related:	1.	Uses reference materials in the library to collect information.
	2.	
	3.	
	4.	
	5.	
Attitude related:	1.	Prefers independent learning.
	2.	Enjoys independent learning.
	3.	Is self-directed/motivated to complete assignments with minimum supervision.
	4.	
	5.	
Feedback Providers:	1.	Teachers
	2.	Parents
	3.	Students
	4.	
	5.	

Exercise 3, Activity 2: Instrument Development (15 minutes)

1. Distribute "Characteristics of a Good Questionnaire," or call attention to page 30.

2. Participants construct a needs assessment questionnaire development matrix by placing goal attributes and feedback providers identifeid in Activity #1 along the borders of matrix.

3. Participants generate questions which evoke feedback from the desired source regarding each goal attribute.

CHARACTERISTICS OF A GOOD QUESTIONAIRE

Best (1970, p. 170) recommends eight characteristics which constitute a good questionnaire. Questionnaires developed for local use should be examined for the following characteristics. A good questionnaire:

1. Deals with a significant topic, one the respondent will recognize as important enough to warrant spending his time on. The significance should be clearly and carefully stated on the questionnaire or in the letter that accompanies it.
2. Seeks only that information which cannot be obtained from other sources such as school reports or census data.
3. Is as short as possible, only long enough to get the essential data. Long questionnaires frequently find their way into the wastebasket.
4. Is attractive in appearance, neatly arranged, and clearly duplicated or printed.
5. Contains clear and complete directions; important terms are defined, each question deals with a single idea, all questions are worded as simply and as clearly as possible, and the categories provide an opportunity for easy, accurate, and unambiguous responses.
6. Uses only objective questions, with no leading suggestions as to the respons desired. Leading questions are just as inappropriate on a questionnaire as they are in a court of law.
7. Presents questions in good psychological order, proceeding from general to more specific responses. This order helps the respondent to organize his own thinking, so that his answers are logical and objective. It may be well to present questions that create a favorable attitude before proceeding to those that may be a bit delicate or intimate. If possible, annoying or embarrassing questions should be avoided.
8. Is easy to tabulate and interpret. It is advisable to construct a tabulation sheet, anticipating how the data will be tabulated and interpreted, before the final form of the question is decided upon. This working backward from a visualization of the final analysis of data is an important step in avoiding ambiguity in questionnaire form.

Exercise 3, Activity 2: Instrument Development

Domain:

Knowledge_____

Skill_____

Attitude_____

NEEDS ASSESSMENT QUESTIONNAIRE DEVELOPMENT MATRIX

Goal / Attribute / Feedback Provider					

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Exercise 3, Activity 2: Instrument Development

Domain:

Knowledge x

Skill _____

Attitude _____

NEEDS ASSESSMENT QUESTIONNAIRE DEVELOPMENT MATRIX

Goal Attribute / Feedback Provider					
Teachers	What percentage of your students are able to use free time to complete assignments?		What percentage of your students apply logical methods of study appropriate to assignments?		
Parents	Have you observed your child use free time to complete assignments?		Have you observed your child use free time to complete school assignments by using a logical plan?		
Students	Do you use free time to complete assignments?		Do you use free time to organize your homework before you begin working on it?		

Exercise 3, Activity 3: Determining Instrument Format (10 minutes)

1. Discuss standard administration and scoring procedures.
2. Participants organize items into questionnaire format. Call attention to example provided on page 34.
3. Review relationships between goals and data sources on page 35.

Exercise 3, Activity 3: Determining Instrument Format

PARENT QUESTIONNAIRE
Apple Way School
197__ Needs Assessment

We are in the process of planning next year's school program. To help us plan opportunities which will best encourage learning and be enjoyed by your child, please answer the following questions and return the form to your child's teacher. If you have more than one child attending Apply Way School, answer for the child whose birthdate is next after today.

My child is a _____ in grade/level _____
(girl/boy) 1, 2, 3, etc.

	Questions	Yes	No	Undecided
1.	Have you observed your child use free time to complete school assignments?	☐	☐	☐
2.	Have you observed your child use a plan to complete school assignments?	☐	☐	☐
3.				
4.				
5.				
6.				

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RELATIONSHIP BETWEEN GOALS AND DATA SOURCES

Activity 3:

Goal	DATA SOURCE: Tests		Survey Items				Records
	NRT	CRT	Teachers	Parents	Students	Support Staff and Administrators	
1. Physical Health		Physical Performance Test	21 - 25	21 - 25	1 - 3	21 - 25	Physical Fitness Awards
2. Cultures	Social Science Subtest CTBS	Multi Culture Studies Test	46 - 50	46 - 50	4 - 6	46 - 50	Demo-graphic Data
3. Citizenship		Pupil Observation Scale	6 - 10	6 - 10	7 - 9	6 - 10	Voting Data Vandalism Reports
4. Reading	Reading Subtest, CTBS	Wisconsin Design CRT's	11 - 15	11 - 15	10 - 12	11 - 15	
5. Individual Learning		Pupil Observation Scale	41 - 45	41 - 45	13 - 15	41 - 45	
6. Self-worth	Piers-Harris at Grades 3 & 6	Pupil Observation Scale	1 - 5	1 - 5		1 - 5	Discipline Referrals
7. Math	Math Subtest, CTBS	Wisconsin Design CRT's	36 - 40	36 - 40	19 - 21	36 - 40	
8. Leisure		Pupil Observation Scale	16 - 20	16 - 20	22 - 24	16 - 20	Club/Organi-zation Memberships
9. Language	Language Subtest, CTBS		26 - 30	26 - 30	25 - 27	26 - 30	
10. Occupations	Career Awareness Inventory	Pupil Observation Scale	31 - 35	31 - 35	28 - 30	31 - 35	

Example

Exercise 3, Activity 4: Summarizing and Reporting Data (15 minutes)

1. Participants prepare data summary and reporting form. Examples of summary and reporting forms are provided on pages 37 and 38. Participants are encouraged to develop forms which are appropriate to the questionnaire they develop during the workshop.
2. Two groups describe their questionnaire items and data reporting forms using overhead transparencies.
3. Total group evaluates questionnaire items using criteria distributed during Activity 2 of this exercise.

Activity 4: Summarizing and Reporting Data

Questionnaire Data Summary Form

Goal Referent	Number	Question	Number Responding	Percent Responding			Comments/ Implications
				Yes	No	Not Certain	
8	1	Free time to complete assignments	138	84	12	4	This appears to be an isolated concern among a few parents
8	2	Logical plan to compelte assignments	138	70	30	-	Parents would like to see more emphasis on systematic planning

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Activity 4: Summarizing and Reporting Data

Goal Referent	Number	Question	Number Responding	Response Category/Data Summary				Comments/ Implications
				Very Often	Fairly Often	Once In A While	Hardly Ever	
4, 8	1	Have you seen your child read during leisure time?	50	18	7	7	18	
4	2	Have you discussed with your child what he/she has read?	50	12	0	10	28	
4	3	Does your child bring books from a library?	50	5	10	25	10	
5	4	Have you seen your child use the phone book?	50	0	5	5	40	
4	5	Have you seen your child read maps?	50	3	10	2	35	
5	6	Have you seen your child read the local newspaper?	50	10	15	10	15	
9	7	Have you seen your child listen well in noisy surroundings?	50	30	10	5	5	
7	8	Have you seen your child excited about arithmetic?	50	10	30	5	5	
2	9	Have you seen your child act well toward people who are in a cultural group different from yours?	50	35	5	10	0	
6	10	Have you seen your child fail at a task, then try harder to accomplish it instead of quitting?	50	20	15	5	10	

Exercise 4: Establishing Goal Criticality (Estimated Time: 2 hours)

ACTIVITY 1: Determining Value of Data

The presenter explains that two months have elasped since the meeting when goals were reviewed and ranked for importance. Representatives from each of the three groups which attended that meeting are reconvened to examine the data which have been collected for each goal. These representatives have been selected because they have strengths in program planning. During this second meeting representatives from parents, teachers, and administrators work collaboratively. Representatives from the previous groups should redistribute themselves so that all new groups hetergeneously consist of parents, teachers, and administrators.

Participants are advised to consider all goals to be of equal importance until standards have been set, and discrepancies between present and desired conditions have been identified (Activities 1 and 2). They are cautioned that all data are not of equal value and that some are obtained from more valid and/or reliable sources than others. In this activity participants will examine collected data and determine which data should be emphasized in program planning.

1) Distribute the Data Entry and Discrepancy Identification Form, or call attention to pages 40 - 49.

2) Ask participants, as a team, to review each data entry for Goals 3 through 10, and decide whether they are a) **essential**, b) **supportive**, or c) **irrelevant**. The team consensus is written in the column headed "Type." **Essential** data are those which must exist to justify inclusion of an objective in a program. Participants should be reminded of the importance of planner judgment and should be encouraged to selectively neglect areas which are beyond the resources of the school, are politically unfeasible, or otherwise might be excluded from the program. **Supportive** data are those which suggest activities which should be implemented to assist in achieving desired program outcomes. **Irrelevant information** should not be generated in a well-developed needs assessment. However, if irrelevant data are shown, they should be screened out and discarded during this activity.

3) After each group has agreed on what type of data are in each entry, the groups are encouraged to consider the implications these data may have for program planning. If data are considered to be essential for proposing a program objective, the topic of an objective could be written in the "Implications" column. If data indicate activities necessary to support objective attainment, then those activities might be suggested. When data are determined to be irrelevant, there will be no implications. Goal one, regarding establishing and maintaining good physical health, has been completed as an example.

DATA ENTRY AND DISCREPANCY IDENTIFICATION FORM

GOAL: 1. Each learner will demonstrate those knowledges, skills, and attitudes necessary to establish and maintain good physical health.

DATA ENTRY	TYPE	STANDARD	IMPLICATIONS
1. Grade 6 students averaged 65% correct on a departmental test, measuring basic health knowledge.	essential	80%	Nurse should inservice the staff on health education practices.
2. The physical education program for grades K-2 has been identified as affective. Teachers of grades 3-6 do not feel adequately prepared to teach physical education.	supportive		Better use should be made of County Physical Education Consultant. Inservice training for grade 3-6 teachers should be provided.
3. Each 3-6 student has 90 minutes of physical education per week.	supportive		Time spent is adequate with present class structure.
4. Eight percent of the students have received the President's Physical Fitness Award.	essential	30%	The program is working well for the talented; the less talented are being neglected. The school should consider the PPFA standards when constructing their program.
5. The school nurse reports 10.8 days absent per pupil last year.	essential	Not to exceed 8 days.	
6. Eighty percent of the Grade 6 students attended a major league baseball game en masse.	irrelevant		Better health care instruction for students and parents may reduce illnesses.

Discrepancy Identification

1 2 3 4 5 6 7 8 9

LEAST MODERATE MOST

DATA ENTRY AND DISCREPANCY IDENTIFICATION FORM

GOAL: 2. Each learner will demonstrate those knowledges, skills, and attitudes necessary to understand the American cultures and other cultures of the world.

DATA ENTRY	TYPE	STANDARD	IMPLICATIONS
1. On a locally developed, multi-culture studies test for Grades 3 and 6 the average percent correct was: Grade 3 = 35% Grade 6 = 55%	essential	Grade 3 = 50% Grade 6 = 70%	
2. The district has recently hired a multi-cultural education coordinator.	supportive		
3. Fifteen student behaviors have been identified as reflecting "positive multi-cultural attitudes." On the average, students demonstrated the following numbers of these attitudes according to teacher checklist: Grade 1 2 3 4 5 6 12.1 11.7 10 7.2 9.6 8.4	essential	Grade 1=13 Grade 2=13 Grade 3=13 Grade 4=13 Grade 5=13 Grade 6=13	
4. On the staff of 25 teachers there are 16 Anglo, 2 Oriental, 4 Black (including principal), and 3 Mexican-Americans.	supportive		

Discrepancy Identification

1 2 3 4 5 6 7 8 9

LEAST MODERATE MOST

DATA ENTRY AND DISCREPANCY IDENTIFICATION FORM

GOAL: 3. Each learner will demonstrate those knowledges, skills, and attitudes necessary to display good citizenship and responsible social interaction.

DATA ENTRY	TYPE	STANDARD	IMPLICATIONS
1. Twelve student behaviors were identified as reflecting "good citizenship." A sample of Grade 4, 5, and 6 students on the average exhibit 7.2 of these behaviors as recorded by teacher checklist. 2. Ninety percent of the students report that they like school. 3. The voting records of the precinct including this school attendance area indicate that 60% of the registered voters voted in the last general election, and 20% voted in the last school board election. 4. Vandalism at the school is not a problem. Acts of vandalism occurred 25 times during last school year.			

Discrepancy Identification

1 2 3 4 5 6 7 8 9

LEAST MODERATE MOST

DATA ENTRY AND DISCREPANCY IDENTIFICATION FORM

GOAL: 4: Each learner will demonstrate those knowledges, skills, and attitudes necessary to acquire information through reading.

DATA ENTRY	TYPE	STANDARD	IMPLICATIONS
1. The school employs a half-time reading specialist who serves as the resource teacher and half-time assistant principal.			
2. The following are the percentages of students above Q_1 in Grades 1-6 in the CTBS reading subtest.[1] Grade 1 2 3 4 5 6 Above 65% 60% 65% 58% 62% 62% Therefore, below 35% 40% 35% 42% 38% 38%			
3. There are few low ability-high interest supplementary materials in the building.			
4. Eighty-five percent of the parents report that their child "likes to read."			
5. A survey of students indicated that 70% enjoyed their reading classes.			
6. Seventy-five percent of the teachers indicated that the current individualized reading program is burdensome.			

Discrepancy Identification

1 2 3 4 5 6 7 8 9

LEAST MODERATE MOST

DATA ENTRY AND DISCREPANCY IDENTIFICATION FORM

GOAL: 5. Each learner will demonstrate those knowledges, skills, and attitudes necessary to develop an organized system for independent learning.

DATA ENTRY	TYPE	STANDARD	IMPLICATIONS
1. The school has an excellent reference resource center.			
2. Attempts to individualize instruction have met moderate success in math and little success in reading.			
3. Of 100 randomly selected 5th and 6th grade students, 40% had completed homework assignments when they knew ahead of time that the assignments would not be "graded."		70%	
4. The "contract" system of instruction is used in social studies by 20 of the 24 staff members.			
5. Thirty-eight percent of the students scored above Q_2 on the CTBS Reference Skills Subtest.		50%	
6. Grades 4-6 studetns averaged 5.2 behaviors of 13 identified as reflecting independent learning skills (teachers checklist).		9.0	

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Discrepancy Identification

1 2 3 4 5 6 7 8 9

LEAST MODERATE MOST

57

DATA ENTRY AND DISCREPANCY IDENTIFICATION FORM

GOAL: 6. Each learner will demonstrate those knowledges, skills, and attitudes necessary to establish and maintain a feeling of self worth.

DATA ENTRY	TYPE	STANDARD	IMPLICATIONS
1. There is no formal program in the district dealing with this area.			
2. Thirty percent of Grade 3 and 33% of Grade 6 students were above the normative median on the Piers Harris Self Concept Scale.		50%	
3. Fifteen behaviors were identified as characteristic of good self-concept. The average of these pupil behaviors observed by teachers was 6.3.		10	
4. Eighty percent of the staff have had no formal training in self concept enhancement.			
5. Instructional materials designed to develop student feelings of self worth are not readily available.			
6. Teachers rank student self-concept 1.7 on a five point scale where 1=negative self concept and 5=positive self concept.		4.0	
7. Currently, 25% of the students have been reported to the office for disciplinary reasons (some several times).		5	
8. Currently, the reading achievement of the students averages one year below grade level.			

Discrepancy Identification

1 2 3 4 5 6 7 8 9

LEAST MODERATE MOST

DATA ENTRY AND DISCREPANCY IDENTIFICATION FORM

GOAL: 7. Each learner will demonstrate those knowledges, skills, and attitudes necessary to understand and utilize mathematical concepts.

DATA ENTRY	TYPE	STANDARD	IMPLICATIONS
1. There is no math specialist in the building. 2. The following are the percentages of students above Q_1 in Grades 1-6 on the CTBS Math Subtest. Grade 1 2 3 4 5 6 Above 60% 65% 68% 70% 72% 75% Below 40% 35% 32% 30% 28% 25% 3. There is an excellent supply of supplementary math materials in the building. 4. A survey of parents reported that 75% were satisfied with their child's math progress. 5. Criterion-referenced tests are used by classroom teachers to monitor pupil math progress. 6. Parent volunteers are used considerably to assist in individualizing the program.		same as performance level	

Discrepancy Identification

1 2 3 4 5 6 7 8 9

LEAST MODERATE MOST

DATA ENTRY AND DISCREPANCY IDENTIFICATION FORM

GOAL: 8. Each learner will demonstrate those knowledges, skills, and attitudes necessary to wisely use leisure time.

DATA ENTRY	TYPE	STANDARD	IMPLICATIONS
1. Seventy percent of the parents reported that their children do not know how to choose free-time activities.			
2. Parents reported that their children watch TV an average of 2.5 hours per day while home.			
3. On a questionnaire the following results were recorded for 100 Grade 4, 5, and 6 students:			
a. Seventy knew what the word "leisure" meant.		100% of students	
b. Eighty percent reported "enjoying" what they usually do during their free time.			
c. Given a list of 30 leisure time activities with the opportunity for students to add their interests not on the list, students were asked to estimate the time they spend in leisure activities.			
10% of the students were involved in leisure activities 80% of their spare time		20% of students	
30% were involved in leisure activities 50% of their spare time		60% of students	
50% were involved in leisure activities 20% of their spare time		20% of students	
10% only engaged in random play		0 students	
4. There is an extensive municipal summer recreational program for children that is attended by 17% of the students in this school.		50%	
5. The school has 5 clubs which emphasize hobbies, crafts, and skills which students can join. Forty-five percent are involved in at least one of these clubs.		70%	

DATA ENTRY AND DISCREPANCY IDENTIFICATION FORM

GOAL: 9. Each learner will demonstrate those knowledges, skills, and attitudes necessary to communicate through receptive and expressive language.

DATA ENTRY	TYPE	STANDARD	IMPLICATIONS
1. A sample of 20 high school teachers report that writing skills are a "serious" deficiency for a majority of students entering high school from this school.			
2. Seventy percent of Grade 6 students report "not liking" to give a talk in front of the class.		50	
3. Twenty-five percent of Grade K, 1, and 2 students were above the median of a standarized norm-referenced listening test.		50	
4. Five of 25 teachers feel well prepared to teach writing skills.			
5. Thirty percent of the students scored above Q_2 on the CTBS Language Subtest.		50	
6. Teacher ratings of a sample of 20 orally presented book reports by grade 4 students averaged 3.4 on a 10 point scale (10 is high).		6.0	
7. Teachers report that the language materials are not well suited to the student population.			

Discrepancy Identification

1 2 3 4 5 6 7 8 9

LEAST MODERATE MOST

DATA ENTRY AND DISCREPANCY IDENTIFICATION FORM

GOAL: 10. Each learner will demonstrate those knowledges, skills, and attitudes to explore potential occupational choices.

DATA ENTRY	TYPE	STANDARD	IMPLICATIONS
1. The building principal reports that she is unhappy with the lack of commitment given to career education in the district.			
2. There is a 10% unemployment rate in the community.			
3. Eighty percent of the teachers are unable to distinguish "career education" from "vocational education."			
4. There is no formal career education program in the elementary or junior high schools for the district.			
5. Forty percent of a sample of students in grades 5 and 6 scored above the normative median on the Career Awareness Inventory.		65	

Discrepancy Identification

1 2 3 4 5 6 7 8 9

LEAST MODERATE MOST

Activity 1: Determining the Value of Data.
Key to Type of Information Contained on Data Entry Forms

Goal	Data Entry							
	1	2	3	4	5	6	7	8
1	E	S	S	E	E	I		
2	E	S	E	S				
3	E	S	S	E				
4	S	E	S	S	E	S		
5	S	S/I	E	S	E	E		
6	S	E	E	S	S	E	E	I
7	S	E	S	S	S	S		
8	S	S	a - E b - S c - E	E	E			
9	S	E	E	S	E	E	S	
10	S	S	S	S	E			

E = Essential

S = Supportive

I = Irrelevant

Exercise 4, Activity 2: Set Goal Standards

Goal performance standards must be established as a basis for determining the discrepancy between the present condition, "what is," and the desired condition, "what should be."

To complete the next activity, which demonstrates how performance standards are developed, participants should continue to work in groups as they did during Activity 1. They will continue to use the Data Entry and Discrepancy Identification Form (page 40-49) introduced in Activity 1 of this Exercise. The participants should concern themselves only with the information classified as essential during the previous activity. This information reveals the present level of performance by the target population. Knowing the present level of performance, ("what is"), the participants should, by consensus, determine the desired performance standard ("what should be") for goals 3 and 4, pages 42 and 43. Performance standards have been supplied for the remaining goals. Record these desired standards in the "standards" column on the Data Entry and Discrepancy Identification Form.

Exercise 4, Activity 3: Estimate the Size of Discrepancy Between the Present and Desired Conditions

With the completion of Activities 1 and 2, the participants are prepared to estimate the discrepancy between the present and desired conditions.

1. Have participants, who are continuing to work as teams, review the present and desired conditions of each goal.

2. The teams then come to a consensus regarding the estimated discrepancy for each goal using a rating scale technique. Each goal is scaled on a continuum of 1 to 9, with 9 being maximum. Only one discrepancy rating will be assigned to each goal.

3. After a discrepancy rating for each of the goals has been assigned, record these ratings on the scale at the bottom of the Data Entry and Discrepancy Identification Form (pages 40-49).

4. Participants should select two goal areas and speculate on the implications for program planning in these areas, if the anticipated program is to attain its goals. This speculation should include discussion of possible causes of discrepancies, proposed solution strategies, etc.

Exercise 4, Activity 4: Establishing Goal Criticality

By this point, the two elements used to establish criticality, determining goal importance (Exercise 1) and estimating the size of discrepancy (Activity 3), have been introduced. The information related to these two elements is now merged to establish the relative degree of criticality for each goal. Because it is essential to present data to decision makers and program planners in a way that is clear and can promote decision making, a criticality matrix is used. To develop a criticality matrix, participants are asked to:

1. Transfer goal importance indices obtained from Exercise 1 onto the goal importance scale at the top of page 54.

2. Transfer the discrepancy ratings from Exercise 4, Activity 3 onto the discrepancy scale also at the top of page 54.

3. Plot each goal onto the criticality matrix at the point where the importance index intersects the discrepancy rating. Label that point with the goal number.

Three criticality matrices will exist; one for teachers, one for administrators, and one for parents. The importance indices will differ among the three groups. However, because the discrepancy information has been determined by a group representing all three constituents, these data will be consistant for each of the three matrices.

4. Discuss possible procedures for resolving conflicts.

ESTABLISHING CRITICALITY FORM

GROUP: _____

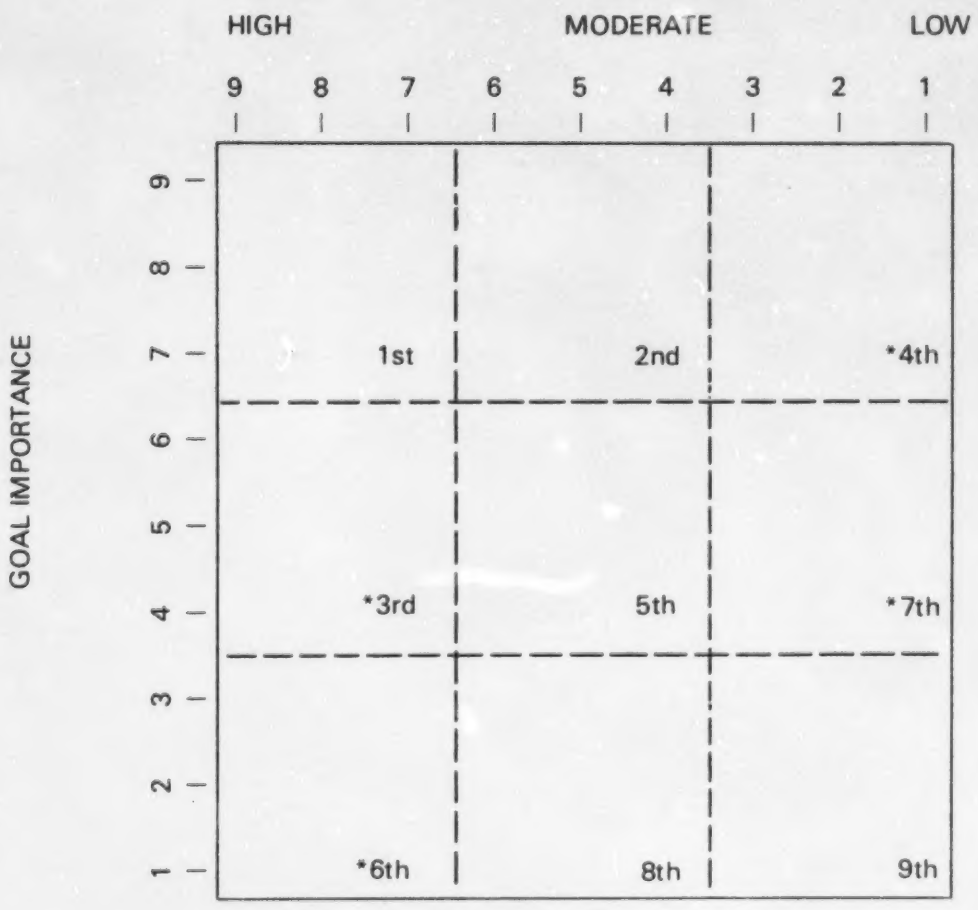
A. GOAL IMPORTANCE: SCALE

1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
Least				Moderate				Most

B. DISCREPANCY: SCALE

1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
Least (none)				Moderate				Most

C. Criticality Matrix



(*Recommended priority sequence)

To The Presenter:

RESOLVING CONFLICTS

The criticality matrices developed by the parents, teachers, and administrators and support staff may be different depending on the importance ratings assigned to the goals by the various groups. Before program planning can proceed, differences among these groups must be resolved.

Decision rules for achieving a consensus should have been established in Step 2 of the needs assessment process. The trainer may need to resolve differences in the goal ratings to establish one criticality matrix which will be accepted as the basis for determining program planning priorities. To resolve differences, the trainer should be aware of group process strategies to establish consensus.

ESTABLISHING PROGRAM PLANNING PRIORITIES BASED ON GOAL CRITICALITY

After consensus has been reached, the criticality matrix provides a base for setting program planning priorities. An understanding of the matrix is the first essential. Review the logic underlying the scheme for establishing criticality. Discuss the sequencing of cells from high (1st) to low (9th) on the matrix used in Activity 4. If time allows, discuss situations in which this sequencing may be altered. Emphasize that people, not the data, make decisions.

Identify the kinds of conditions or constraints occurring from district to district which supply important input for program decision making. The concept of "selected neglect" is once again appropriate to review the support data that were reported, and the effect on criticality of causes of discrepancies and proposed solutions strategies.

SAMPLE NEEDS ASSESSMENT MANAGEMENT PLAN

STEP	GROUP/PERSONS TO CONTACT	MAJOR RESPONSIBILITY	ESTIMATED TIME TO COMPLETE	DATE FOR COMPLETION
1. Conceptualize program scope and implications	School Advisory Committee Staff Committee Resource Teacher Principal	Principal	2 Weeks	Janaury 15
2. Set decision rules	Staff Committee Evaluator	Staff Committee Chairperson	1 Day	January 15
3. Set Goals	Parents Teachers Support Staff Principal	Staff Committee Chairperson	2 Weeks	February 1
4. Prioritize goals	Parents Teachers Support Staff Principal Evaluator	Principal	1 Day	February 1
5. Conceptualize data colleciton management process	Evaluator Principal Resource Teacher	Evaluator	1 Week	February 15
6. Obtain instruments including purchasing, developing, adopting, and adapting	Staff Committee Evaluator Principal	Evaluator	4 Weeks	February 25
7. Obtain approval up to this point	School Advisory Committee Principal Teachers	Principal	2 Weeks	February 25

(This plan is to illustrate a process - it was not taken from operational setting)

SAMPLE NEEDS ASSESSMENT MANAGEMENT PLAN

STEP	GROUP/PERSONS TO CONTACT	MAJOR RESPONSIBILITY	ESTIMATED TIME TO COMPLETE	DATE FOR COMPLETE
8. Collect, summarize, and report data	Teachers, Parents, Principal, Students	Evaluator	4 Weeks	March 30
9. Establish standards of performance (what should be)	Staff Committee, School Advisory Committee, Evaluator, Principal	Staff Committee Chairperson	3 Days	April 15
10. Determine discrepancies between what is and what should be	Evaluator	Evaluator	1 Day	April 15
11. Determine criticality	Evaluator	Evaluator	1 Day	April 15
12. Screen for areas of selected neglect	Staff Committee, School Advisory Committee, Resource Teachers	Principal/Resource Teacher	1 Day	April 20
13. Analyze causes of discrepancies and proposed solution strategies	Teachers, Parents, Principal, Resource Teachers	Staff Committee Chairperson	1 Week	April 31
14. Develop objectives and activities	Staff Committee, School Advisory Committee, Principal, Evaluator, Resource Teachers	Staff Committee	10 Days	May 10
15. Total review of the process leading to program definition and writing	Staff Committee, School Advisory Committee, Principal, Evaluator, Central Office Administrators	Principal	5 Days	May 15

(Program writing will take approximately one week).

SAMPLE NEEDS ASSESSMENT MANAGEMENT PLAN

ACTIVITY	JANUARY	FEBRUARY	MARCH	APRIL	MAY
1. Conceptualize program scope and implications	A ●				
2. Set decision rules	B ●				
3. Set goals	B ●				
4. Prioritize goals	A ●				
5. Conceptualize data collection management process		D ●			
6. Obtain instruments including purchasing, developing, adopting and adapting		D ●			
7. Obtain approval up to this point		A ●			
8. Collect, summarize, and report data			D ●		
9. Establish standards of performance (what should be)				B ●	
10. Determine discrepancies between what is and what should be				D ●	
11. Determine criticality				D ●	
12. Screen for areas of selected neglect				A&C ●	
13. Analyze causes of discrepancies and proposed solution strategies				B ●	
14. Develop objectives and activities					● B
15. Total review of the process leading to program definition and writing					A ●

Major Responsibilities:

A = Principal
B = Staff Committee Chairperson
C = Resource Teacher
D = Evaluator
E =
F =

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